

Remarks

Claims 1-19 were pending and rejected. Reconsideration in view of the amendments above and remarks below is respectfully requested.

In paragraphs 2 and 3, the Examiner rejected claims 7, 8, 11 and 12 under 35 USC § 102(b) over Hsiung.

Hsiung is directed at a closed channel water filtration system that receives water at a lower inlet, filters the water through a bed of buoyant media particles, and exits the filtered water from an upper outlet. During a cleaning process, the upper outlet is closed, bubbles are sent through the buoyant media particles, and a lower drain is opened to allow the water arriving at the inlet to pass. The system uses a flow meter or a level monitor to control a valve at the lower drain, so that the water level stays generally constant.

Claim 7 recites “first and second flow regulators to allow flow of liquid into and out of at least one pool of fluid flowing through said open channel network” and “computational means... to control operation of said flow regulators and to determine said containment losses by calculating the measured flow into said at least one pool through a first of said flow regulators and subtracting the measured flow out of said at least one pool through a second of said flow regulators.” Claim 8 depends from claim 7.

Claim 11 recites “in an open channel network... comprising first and second flow regulators to allow flow of liquid into and out of at least one pool of fluid flowing through said open channel network, first and second flow sensors... and computational means... to control operation of said flow regulators, said method comprising: determining, using said computational means, said containment losses by calculating the measured flow into said at least one pool through said first flow regulator and subtracting the measured flow out of said at least one pool through said second regulator.” Claim 12 depends on claim 11.

Claims 7, 8, 11 and 12 each recite an “open channel.” Hsiung describes a closed system. Claims 7, 8, 11 and 12 each recite computation of containment losses by subtracting flow out of a pool from flow into the pool. Hsiung describes a closed system for maintaining water level. Hsiung does not compute containment losses. Accordingly, for at least these reasons, Applicant respectfully submits that Hsiung does not anticipate claims 7, 8, 11 and 12 and respectfully requests that the rejection be withdrawn.

In paragraphs 4 and 5, the Examiner rejected claims 1, 3-6, 16 and 17 under 35 USC § 103(a) over Mastandrea in view of Hsiung.

Mastandrea is directed at a technique that measures water changes in a closed system. By measuring these water changes, Mastandrea can determine whether a leak exists. The language cited by the Examiner (col. 22 lines 49-53) describe that the leakage rate can be determined by measuring the liquid level drop during a test.

Claim 1 recites “maintaining a constant level in at least one pool of fluid flowing between two flow regulators in an open channel” and “calculating the containment losses by subtracting the evaporation losses from the nett flow into said at least one pool.” Claims 3-6, 16 and 17 each depend directly or indirectly from claim 1.

Claim 1 recites an “open channel.” Mastandrea and Hsiung each describe a closed system. Claim 1 recites measuring containment losses by subtracting flow out of a pool from flow into the pool. Mastandrea describes a closed system that measures evaporation rate during a test. Hsiung is directed at a closed channel water filtration system that, during a cleaning process, uses a flow meter or a level monitor to control a valve at a lower drain, so that the water level stays generally constant. Neither Mastanrea nor Hsiung describes computation of containment losses during fluid flow. For at least these reasons, Applicant respectfully submits that Mastandrea in view of Hsiung does not anticipate claims 1, 3-6, 16 and 17 and respectfully requests that the rejection be withdrawn.

In paragraph 6, the Examiner rejected claims 9, 10, 13, 14 and 19 under 35 USC § 103(a) over Hsiung in view of Mastandrea. Claims 9 and 10 depend directly or indirectly from claim 7. Claims 13, 14 and 19 depend directly or indirectly from claim 11.

As stated above, claim 7 recites “first and second flow regulators to allow flow of liquid into and out of at least one pool of fluid flowing through said open channel network” and “computational means... to control operation of said flow regulators and to determine said containment losses by calculating the measured flow into said at least one pool through a first of said flow regulators and subtracting the measured flow out of said at least one pool through a second of said flow regulators.”

As stated above, claim 11 recites “in an open channel network... comprising first and second flow regulators to allow flow of liquid into and out of at least one pool of fluid flowing through said open channel network, first and second flow sensors... and computational means... to control operation of said flow regulators, said method comprising: determining, using said computational means, said containment losses by calculating the measured flow into said at least one pool through said first flow regulator and subtracting the measured flow out of said at least one pool through said second regulator.”

Claim 1 recites an “open channel.” Hsiung and Mastandrea each describe a closed system. Claim 1 recites measuring containment losses by subtracting flow out of a pool from flow into the pool during fluid flow. Hsiung is directed at a closed channel water filtration system that, during a cleaning process, uses a flow meter or a level monitor to control a valve at a lower drain, so that the water level stays generally constant. Mastandrea describes a closed system that measures evaporation rate during a test. Neither Hsiung nor Mastandrea describes computation of containment losses during fluid flow. For at least these reasons, Applicant respectfully submits that Hsiung in view of Mastandrea does not anticipate claims 9, 10, 13, 14 and 19 and respectfully requests that the rejection be withdrawn.

In paragraph 7, the Examiner rejected claims 2 and 15 under 35 USC § 103(a) over Mastandrea.


Claim 2 recites “measuring the change in volume of at least one pool of fluid flowing between flow regulators in an open channel” and “calculating the containment losses by subtracting the evaporation losses from the change in volume of said at least one pool.” Claim 15 depends from claim 2.

As stated above, Mastandrea is directed at a technique that measures water changes in a closed system. By measuring these water changes, Mastandrea can determine whether a leak exists. The language cited by the Examiner (col. 22 lines 49-53) describe that the leakage rate can be determined by measuring the liquid level drop during a test.

Claim 2 recites an “open channel.” Mastandrea describes a closed system. Claim 2 recites computation of containment losses by subtracting flow out of a pool from flow into the pool. Mastandrea describes a closed system that measures evaporation rate during a test. Mastanrea does not describe computation of containment losses during fluid flow. Accordingly, for at least these reasons, Applicant respectfully submits that Mastandrea does not anticipate claims 2 and 15 and respectfully requests that the rejection be withdrawn.

If the Examiner has any questions or needs any additional information, the Examiner is invited to contact the undersigned.

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CERTIFICATE OF ELECTRONIC TRANSMISSION

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By: 
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